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## 3,029,809 BRUSH FOR EDENTULOUS MOUTH Esther Madlung, 2331 Olive St., Blue Island, Iil. Filed May 13, 1960, Ser. No. 28,958 4 Claims. (Cl. 128—62)

This invention relates to an article of manufacture which may be utilized to clean, brush, and massage the tissue of an edentulous or partially edentulous mouth.

oral cavity or mouth is equally as important for the edentulous as for the dentulous mouth. Harmful bacteria and other deposits normally found in the edentulous mouth collect along the gum surfaces, and to an accentuated degree with artificial dentures. Inasmuch as disease 15 may result or unpleasant breath occur, it is important to remove harmful deposits and bacteria from the gum tissue as well as (and possibly more important) to maintain the gum tissue in a proper tone.

It is a matter of little dispute that massaging of the 20 gums, whether it be in an edentulous or dentulous mouth, increases the circulation of blood through the gum tissue, thereby aiding in the removal of fatigue products in the circulation system and increasing the flow of proper nutrients into the massaged area. More blood flows into 25 the gum tissue during and after massaging and thereby aids in the proper maintenance of a healthy mouth.

Massaging is generally classified into four types (1) stroking, (2) kneading, (3) rubbing, and (4) tapping. Of these four types of massaging, stroking and 30 rubbing can be best applied to the gum tissues in the mouth. Rubbing may be described as comprising an abrasive action between two opposed surfaces while stroking is a more gentle action, whereby two surfaces are drawn past one another, so that various portions of both 35 surfaces are not in contact with each other during portions of the stroke.

The undesirability of massaging by rubbing, especially on gum tissue, is readily perceived, since rubbing also has an excessive abrasive effect which will, and can, add displeasure and may actually provide gum tissue damage.

However, if the massage is applied in the form of stroking, then the gum tissues are stimulated gently and without the adverse effects which may be produced by rubbing. The beneficial effects provided by stroke massaging may be further supplemented by cleansing the massaged area with selected medicaments or dentifrices.

It is therefore a principal object of my invention to provide a device which stroke massages the gum tissues of an edentulous mouth.

Another object of my invention is to provide a device which may be utilized to not only stroke massage the gum tissues of an edentulous mouth, but also to clean the gum tissues at the same time.

It is another object of this invention to provide a device which is of such a physical construction that the gum tissue of an edentulous mouth can be stroke massaged and which contains medicaments and dentifrices which will clean the massaged gum tissue at the same

It is another object of the invention to provide a device which may be used to stroke massage substantially the entire gum tissue ridge of an edentulous mouth.

It is another object of my invention to provide a device which can be readily utilized to simultaneously stroke 65 massage opposing slopes of the gum tissue ridge of an

Further objects and features of my invention pertain to the particular structure and arrangements whereby the above-identified and later-introduced objects of the invention are obtained.

The invention both as to its structure and method of

usage will be better understood by reference to the following and in view of the drawings forming a part thereof, wherein:

FIGURE 1 is a perspective view of one embodiment of my invention; and

FIGURE 2 is a perspective view illustrating the use to which the embodiment of my invention illustrated in FIGURE 1 can be applied.

Referring now to the drawings, like numerals designat-The maintenance of a high standard of hygiene in the 10 ing corresponding parts in all figures of the drawing are The numeral 2 denotes generally the gum massager illustrated in the disclosed embodiment of my invention. Gum massager 2 is comprised of a manipulating handle 4 of an elongated design to facilitate the proper handling thereof while in the control of the user. Attached to one end of the manipulating handle 4 by any convenient means, such as gluing or the like, is massaging pad 6. Pad 6 has a groove 8 formed therein in substantially the median plane intermediate the planes containing the sides 10 and 12 of pad 6. Intermediate the groove 8 and side 12 of pad 6 is formed slot 14, and intermediate the groove 8 and side 10 is formed slot 16.

Massaging pad 6 may be comprised of cellular type soft foam which is capable of retaining a reservoir of liquid for use when desired. It is also desirable that massaging pad 6 be formed of a material which will not react with the reservoir of stored liquid in any manner either chemically or by solvent action. This is readily understood, since when a medicament is chosen, it is always desirable that the medicament be applied in the selected form and free from all contaminants. Polyurethane foams have been developed, and are on the market, which will provide this necessary attribute. The longitudinal dimension of massaging pad 6 as viewed in FIGURE 1 can be of the same order as that of toothbrush bristles. Variations in the longitudinal length of the massaging pad 6, if kept approximately the size of the longitudinal length of toothbrush bristles, will not be

Groove 8 is of a critical height or depth dimension, as viewed in FIGURE 1 with H representing the height, or depth, of the groove 8. The depth of the groove 8 must be such that when the massaging pad 6 is placed over the gum tissue ridge of the edentulous or partially edentulous or partially edentulous mouth, opposite walls of the massaging pads 6 forming the groove 8 will ride upon and substantially cover the entire area of the opposite slopes forming the gum tissue ridge in the edentulous or partially edentulous mouth. If the depth or height of the groove 8 is too shallow, the massaging pad 6 will ride substantially on the top of the gum tissue ridge and will produce a rubbing type of massaging action which will cause undesirable heating as well as objectionable abrading of the gum tissues.

Grooves 14 and 16 which are formed on opposite sides of groove 8 perform the function of permitting the portion of the massaging pad 6 intermediate grooves 8 and 14, and 8 and 16, respectively, to more readily move away from the median axis 3-3 of the gum massager 2 when the gum massager 2 is in use.

It can be seen that slots 14 and 16 need not be as deep or have a dimension equivalent to the dimension H in slot 8, since the movement of the material intermediate slots 8 and 14, and 8 and 16, respectively, is greater on the top surface of the massaging pad 6 as viewed in FIGURE 1 than at points below the top surface, as can be readily understood. The width dimension W of the manipulating handle 4 and the massaging pad 6 may be approximately the same. The width of the massaging pad 6 must be sufficient to enable the walls forming groove 8 to have a degree of resiliency, as will be more clearly understood hereinafter.